#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021864 Address: 333 Burma Road **Date Inspected:** 19-Mar-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Tian Lei, Liu Fa Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

This inspector observed ZPMC personnel fitting up of bike path hand rails in accordance with drawing BKR-NS-40.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 20TR2-038 for weld(s) 009, 011, 013, 015, & 017. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-461.

Bay Number 3

SMAW welding of buttering type welds located on Drainage Castings component identified as DRG-1-10-125-1, DRG-1-10-116-1, & DRG-1-10-97-2 as identified on weld repair data sheet B-CWR-2543 for casting void areas as identified on the critical weld repair report. Welder is identified as welder no. 066479. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s)

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WPS-casting-SMAW-1G-repair-1.

Bay Number 8

This QA inspector performed VT of approximately 100% of the area previously tested and accepted by ZPMC Quality Control personnel. All components were as listed on NWIT notification no. 08577. The member(s) is/are identified as OBG Bike Path as component BK4A-060.

FCAW welding of complete joint penetration welds located on Bike Path component identified as BK004A6-060 weld no.(s) 001, 002, 007, & 165. Welder is identified as welder no. 500479. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

FCAW welding of complete joint penetration welds located on Bike Path component identified as BK004A8-060 weld no.(s) 001, 002, 007, & 130. Welder is identified as welder no. 054459. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

FCAW welding of complete joint penetration welds located on sub assembly component identified as SA7047 weld no.(s) 003 & 004. Welder is identified as welder no. 500405. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on sub assembly component identified as SA7535 weld no.(s) 003 & 004. Welder is identified as welder no. 500405. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

SAW welding of complete joint penetration welds located on sub assembly component identified as SA7047 weld no.(s) 003 & 004. Welder is identified as welder no. 251393. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2c-S.

SAW welding of complete joint penetration welds located on sub assembly component identified as SA7535 weld no.(s) 003 & 004. Welder is identified as welder no. 251393. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2c-S.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

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## **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer